May 17, 2019

VIA ECFS

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

CONNECTED NATION℠
Everyone Belongs.™

Re: Notice of Ex Parte Presentation
WC Docket No. 11-10, *Modernizing the FCC Form 477 Data Program*

Dear Ms. Dortch:

On May 15 and 16, 2019, Ashley Hitt and the undersigned of Connected Nation, Inc. ("Connected Nation") met separately with Preston Wise, Special Counsel to Chairman Pai; Steve Rosenberg, Chief Data Officer, as well as Kirk Burgee, Ken Lynch, Ying Ke, and Suzanne Mendez of the Wireline Competition Bureau; Arielle Roth, Wireline Advisor to Commissioner O'Rielly; Randy Clarke, Wireline Advisor to Commissioner Starks; and Travis Litman, Chief of Staff and Senior Legal Advisor, Wireline and Public Safety, to Commissioner Rosenworcel to discuss the Federal Communications Commission's ("Commission") pending reforms to the Form 477. Thomas Ferree, CEO of Connected Nation, joined in the meeting with Preston Wise.

During the meetings, Connected Nation discussed how the Commission can accomplish its goal of obtaining granular broadband availability information to reliably identify areas that lack access to broadband in the most efficient and least burdensome manner. In particular, Connected Nation urged the Commission to take into consideration longstanding state-level mapping programs, like those administered by Connected Nation in states like Kansas and Minnesota, and build upon those successes and lessons learned to create a much more granular and accurate National Broadband Map. Connected Nation provided several sample broadband coverage maps that compare granular service area reporting in Kansas and in Walton County, Florida, against the current Form 477 census block-level data in the same areas to highlight how the current reporting regime contributes to significant overstatement in many areas, as well understatement in some specific instances. The sample maps are included as attachments to this letter.

Connected Nation explained that its mapping projects in Kansas and Minnesota offer proven examples of where granular polygons, contained within shapefiles, have been created to depict service availability footprints—which are derived from a given provider's network capabilities in given area. These footprints are effectively generated from locations where a standard installation can occur (for wireline services) and from propagation modeling (for wireless services). Connected Nation also explained some of the methodologies it uses to work hand-in-hand with each service provider to obtain the information necessary for shapefile creation. Because coverage footprint polygons are generated based on existing infrastructure capabilities, it is not necessary to geolocate structures first.

Connected Nation also explained that broadband service footprints can be collected in native GIS shapefile format (or similar) from providers that either have existing internal GIS capabilities or have a vendor relationship in place for the production of such shapefiles. Such third-party vendor relationships are fairly common today, wherein many smaller providers work with entities like Connected Nation to prepare their Form 477 filings from coverage areas generated in GIS. In addition, there are several online resources that exist for providers to create their own polygons of service availability, such as ESRI's ArcGIS software, or via a KMZ file drawn in Google Earth. Connected Nation is aware that some states have scheduled workshops for providers to learn about how to do this on their own.

Connected Nation believes that a shapefile-driven reporting approach has several potential advantages over other proposals. First, the generation of shapefiles that depict granular service footprints derived from broadband infrastructure capabilities has been a proven path forward in states like Minnesota, where the resulting map is used to guide the state's Border-to-Border Broadband Grant Program. No additional pilots are needed. These same methodologies for shapefile generation have been utilized by Connected Nation in 16 other states and Puerto Rico as well. Second, shapefiles generated in this way provide significant granularity without the need to first create an underlying dataset of structures/locations with which the data can be paired. Third, implementing a shapefile-based reporting regime is reasonable and less burdensome than some alternatives, particularly considering that providers already incur some costs to provide the Commission with Form 477 data, and that there is at least one proposal under consideration in Congress that would provide filing assistance to smaller service providers. Finally, implementing a system based on shapefile reporting would most likely result in the creation of a new more granular National Broadband Map in the shortest amount of time so that Federal agencies can more quickly utilize the map to guide funding decisions and support broadband buildout to the places that still desperately need it.

Please contact me if you have any questions.

Respectfully submitted,

/s/ *Brent Legg*

Brent Legg
Vice President, Government Affairs
Connected Nation, Inc.

cc: Preston Wise
Steve Rosenberg
Arielle Roth
Randy Clarke
Travis Litman

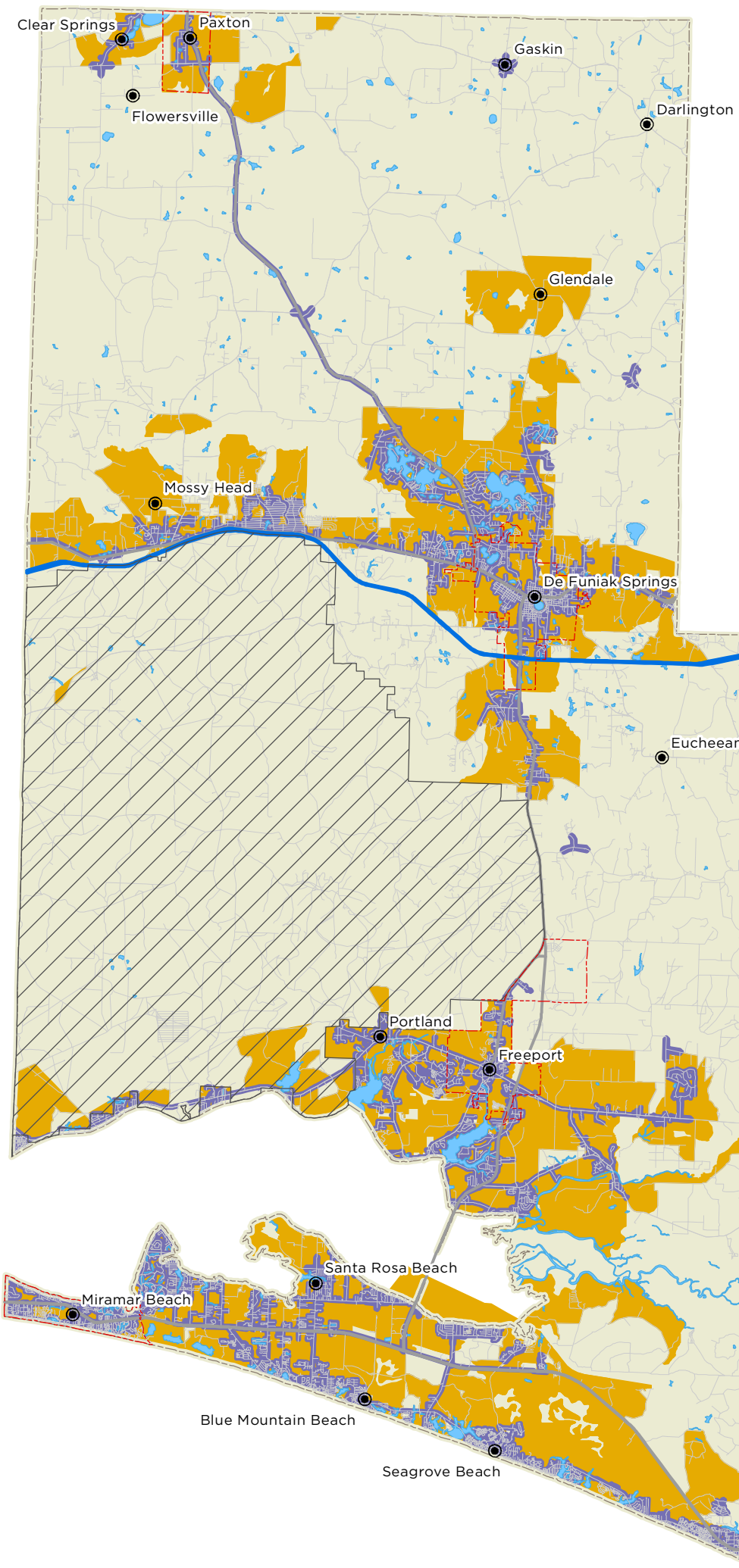
Broadband Service Comparison to FCC Form 477 25 Mbps Download/ 3 Mbps Upload

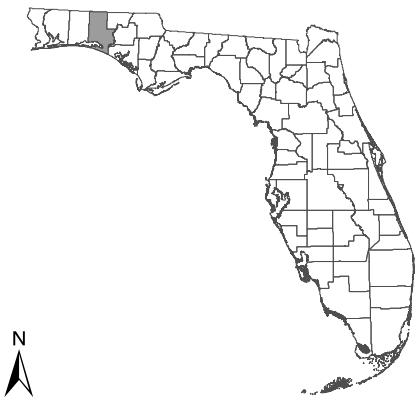
Walton County

Florida

Published May 8, 2018

CONNECTED NATION℠





Symbology

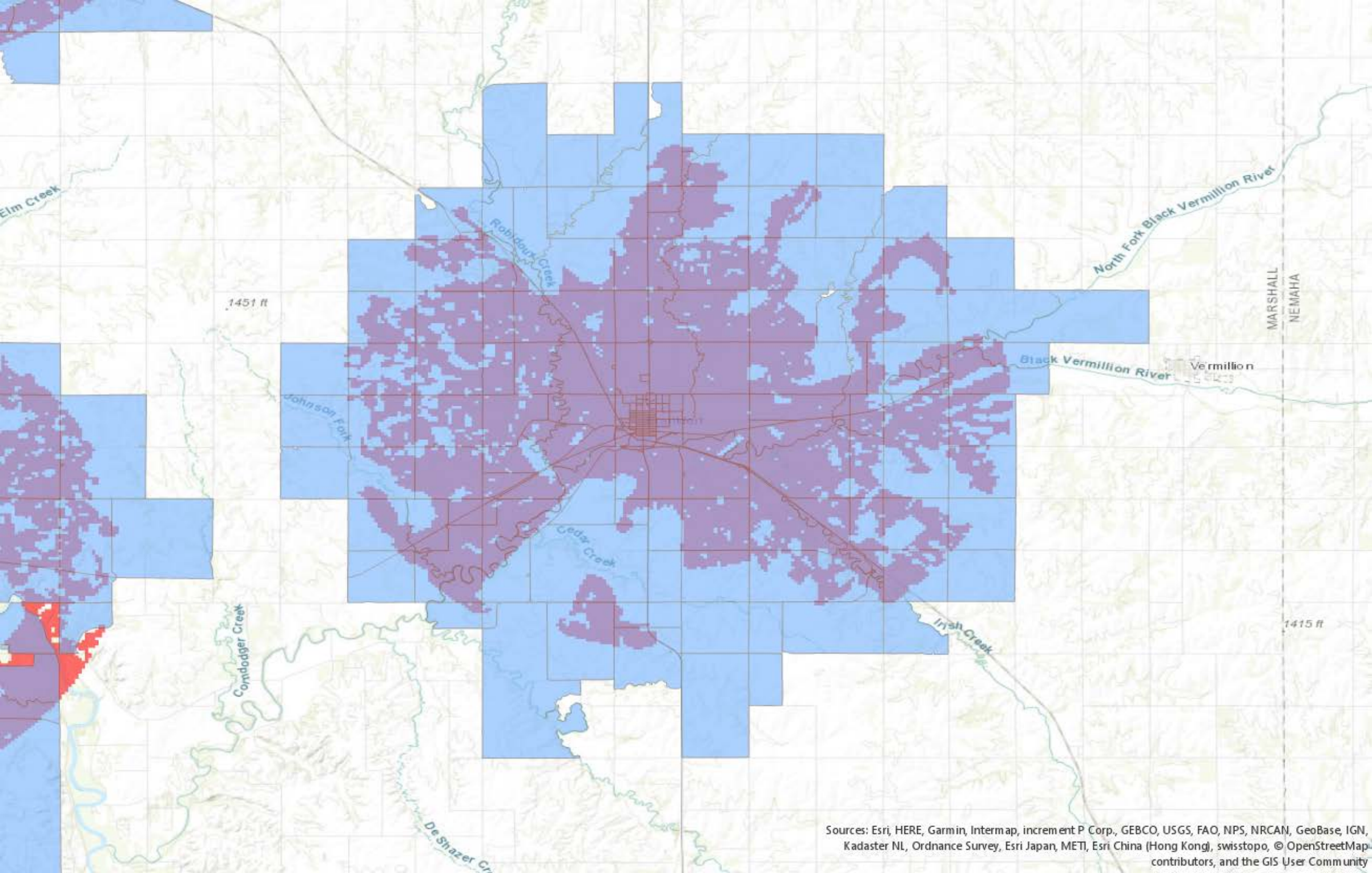
- City
- Interstate
- US Road
- Local Road
- Municipal Boundary
- Water
- Eglin AFB
- CN Validated Broadband
- FCC Form 477 Broadband
- Unserved Areas

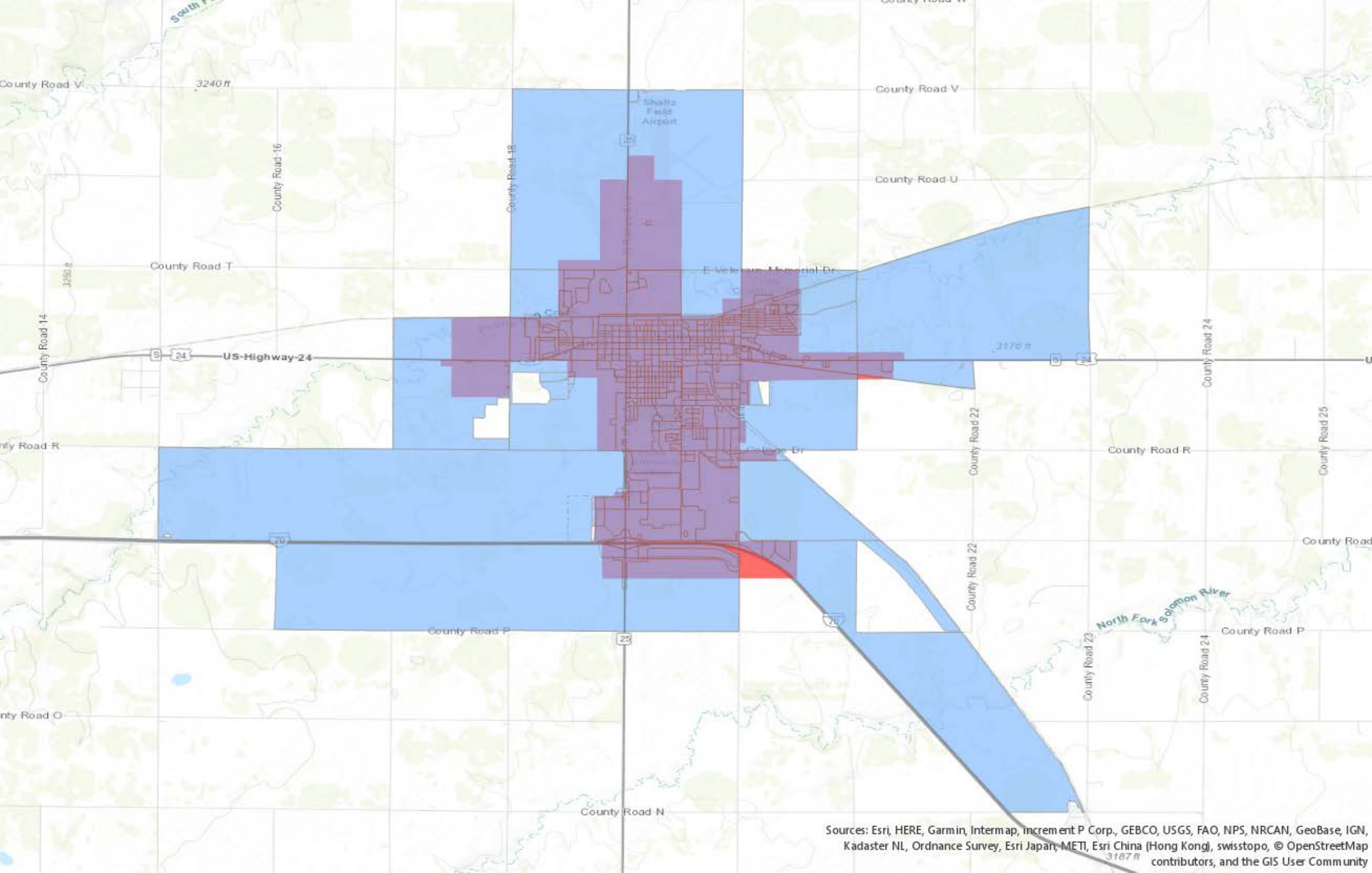
N

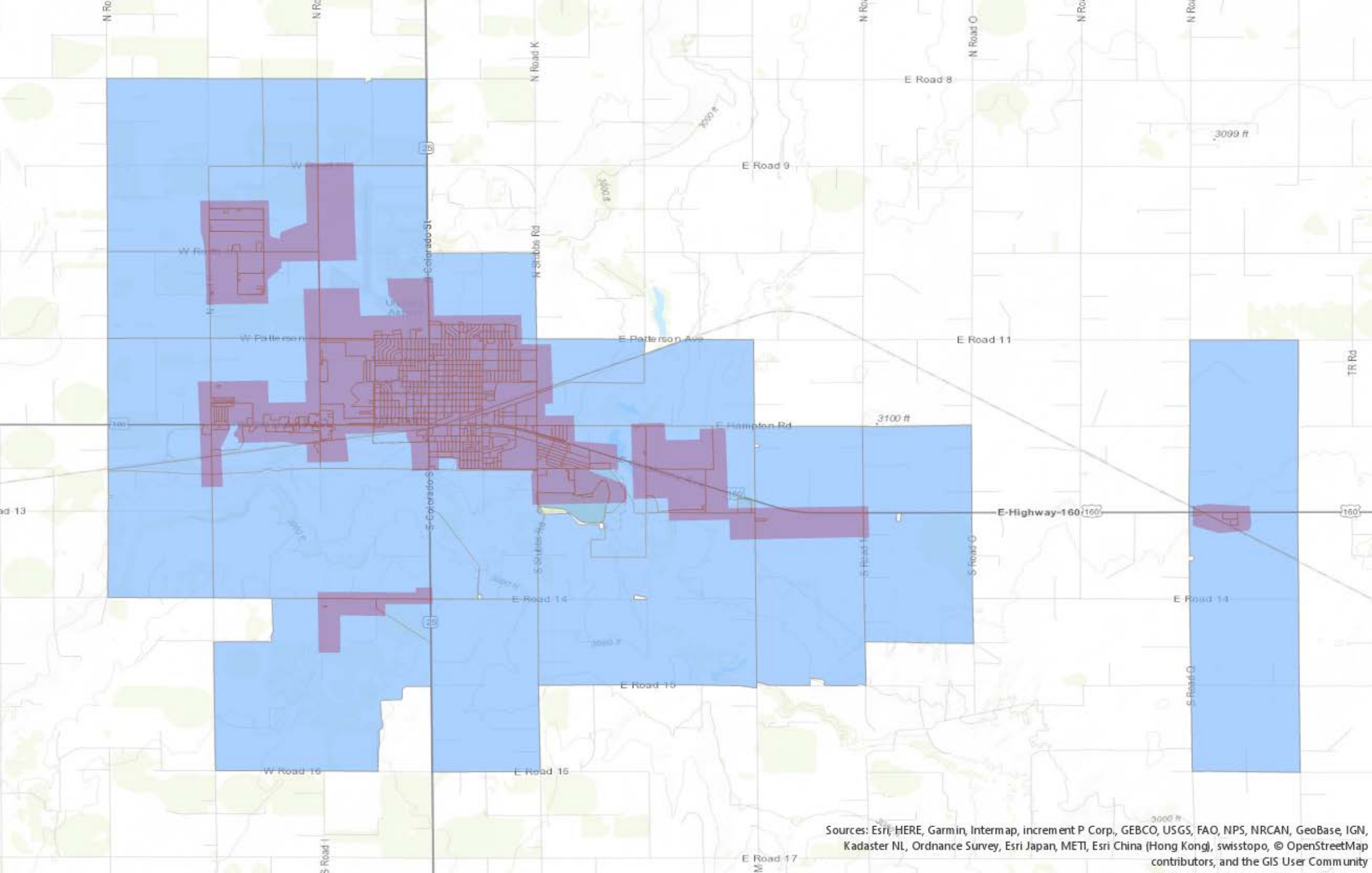
0 1 2 4 6 8 Miles

CN Data Source: On the ground field data collection and online resources.

FCC Data Source: FCC Form 477 Broadband Deployment Data as of December 31, 2016, released November 16, 2017.


Elm Creek
Robidoux Creek
North Fork Black Vermillion River
1451 ft
MARSHALL
NEMAHA
Black Vermillion River
Vermillion
Johnson Fork
Cedar Creek
Irish Creek
1415 ft
Comdodger Creek
De Shazer Cr
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, © OpenStreetMap contributors, and the GIS User Community


County Road V
3240 ft
County Road V
Shaltz Field Airport
County Road 16
County Road 18
County Road U
County Road T
E Veterans Memorial Dr
3250 ft
County Road 14
US-Highway-24
3170 ft
County Road 24
County Road 22
County Road R
County Road 25
College Dr
County Road P
North Fork Solomon River
County Road 23
County Road 24
County Road N
3187 ft
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, © OpenStreetMap contributors, and the GIS User Community


N Road K
E Road 8
3099 ft
E Road 9
N Stubbs Rd
E Patterson Ave
E Road 11
E Hampton Rd
3100 ft
E-Highway-160
S Road O
E Road 14
E Road 15
W Road 16
E Road 16
E Road 17
TR Rd
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, © OpenStreetMap contributors, and the GIS User Community